IN THE SPECIFICATION:

Please amend the specification as follows. A marked up copy of the changes made to the paragraphs below is submitted herewith. None of these changes introduce any new matter within the meaning of 35 U.S.C. §132.

Page 1, third paragraph:

Various arrangements for measuring the speed and/or acceleration of a vehicle moving along a vehicle path such as a roadway have been known. One such device uses radiation sources on one side of the roadway, projecting a beam across the roadway to be received by a respective detector. The detectors are on the opposite side of the roadway from the radiation sources. The detectors detect when the beam is blocked by a wheel of the vehicle. A calculating circuit determines the speed and/or acceleration of the vehicle based on information from the detectors.

Page 3, second paragraph:

In accordance with one embodiment of the present invention, an apparatus is provided for determining the speed and/or acceleration of a vehicle traveling on a vehicle path. The apparatus has a first radiation source arranged at a first side of the vehicle path and a first reflector arranged on a second, opposite side of the vehicle path from the radiation source that reflects the radiation from the first radiation source back towards the first side of the vehicle path. A first detector is arranged at the first side of the vehicle path that receives the reflected radiation from the first reflector and detects a presence or absence of the reflected radiation. A second radiation source is arranged at the first side of the vehicle path and a second reflector is arranged on the on the second, opposite side of the vehicle path from the second radiation source that reflects the

radiation from the second radiation source back towards the first side of the vehicle path. A second detector is arranged at the first side of the vehicle path that receives the reflected radiation from the second reflector and detects a presence or absence of the reflected radiation. A controller which is operatively connected to the first and second detectors calculates at least one of the speed and acceleration of the vehicle in response to the detection by the first and second detectors.

Page 4, first complete paragraph:

The invention provides a method for measuring at least one of the speed and acceleration of a vehicle traveling on a vehicle path by emitting radiation from a first side of the vehicle path, then reflecting the radiation emitted at a second, opposite side of the vehicle path back towards the first side of the vehicle path. The reflected radiation is received at the first side of the vehicle path and a presence or absence of the reflected radiation is detected. At least one of the speed and acceleration of the vehicle is calculated in response to the detecting step.

Page 8, second complete paragraph:

As the vehicle drives through the remote sensing system 10, the vehicle's tires interact with the projected and reflected beams, and the vehicle's speed and/or acceleration can be measured based on detected blocking and/or unblocking of the beams. A single external computer system 22 receives signals from the microcontrollers 20 of each bar 16 in use via an interface such as an RS232 interface 23, and can calculate the vehicle's speed and/or acceleration. The computer system 22 can also supply power to the S/D bar unit(s) 16. In a preferred embodiment, the S/D

unit(s) 16 also include a tilt sensor 24. The computer 22 can be a personal computer or a personal digital assistant or other suitable device.

Page 14, last paragraph:

In a preferred embodiment, the S/D bar units 16 can be adjusted to position the height of the laser beam above the vehicle path surface, such as a roadway, and also to orient the beam to be at least substantially parallel to the surface. To accomplish this, the bar units 16 may be provided with adjustable legs 27, 26, 28 that support the bar units 16, 18 as shown in FIGS. 2-6.

Page 15, second paragraph:

After the segments 30 and 32 have been attached together using the connecting unit 34 and the pins 36, a L-shaped rear plate 38 is attached to the back side of the segments 30 and 32 via attachment screws 40. The rear plate 38 may be provided with a stiffening flange 52 as shown. The rear plate 38 has a vertical housing at its rear corner for receiving an adjustable leg 27. The adjustable leg 27, as can be best seen in the side view of FIG. 6, has a number of holes drilled therethrough one inch (2.54 cm) apart and a releasable pin 42 can be inserted though the housing and a respective hole in the leg 27 in order to provide one inch (2.54 cm) height adjustment for the leg 27 relative to the rear plate 38 and bar assembly 30, 32. The bar segment 30 has a leg 26 that is similarly height adjustable by a pin 44. The bar segment 32 also has a leg 28 that is height adjustable by a pin 46.

Page 15, last paragraph:

By virtue of the releasable pins 42, 46, 48 , each of the legs 27, 26 and 28 can be independently height adjusted to effect coarse adjustment. It is also possible in the preferred embodiment to effect a more fine adjustment on each leg 27, 26, and 28 by the lower portion of each leg having a threaded foot 50 that can be rotated to raise or lower the foot 50 by fine amounts relative to its respective leg 27, 26, and 28. The foot 50 is designated by the reference numeral 50 throughout, because the threaded insertion of the foot into the respective legs 27, 26 and 28 is the same for each leg.

Page 16, first complete paragraph:

Referring now particularly to FIG. 6, it will be appreciated that the arrangement of the legs 27, 26 and 28 permits the S/D bar 16 including the L-shaped rear portion 38 to be adjusted for use on a flat surface, or on a curbed or uneven surface. For example, in the configuration shown in FIG. 6, the rear leg 27 is in a primarily upward position so that it can rest in the top of a curb, while the front legs 26 and 28 can rest on a pavement surface below the curb. For use on a flat roadway surface, the rear leg 27 could be lowered into a fully lowered state, in which the feet of the legs 27, 26 and 28 would be generally in the same horizontal plate, and could rest on a roadway surface. The adjustment of the legs 27, 26 and 28, including both fine and coarse adjustments in the preferred embodiment, also permits the S/D bar 16 to be used on a crowned or otherwise inclined road surface, and still permit a generally horizontal beam.

Page 17, first complete paragraph:

The S/D bar 16 also includes the microcontroller 20 mounted internally of the bar 16 at the location shown. An indicator such as three holes having LED's 54 mounted therein is provided on the front surface of the bar unit 32. The LED's indicate when the entire arrangement including the bars 16 and 18 are in alignment as discussed in more detail below. The end 56 of the S/D bar 16 may have an attachment arrangement that corresponds to the other end 58 of the bars, so that the bars may be cascaded or daisy chained together. Connections 56 and 58 may also include connections for power and/or data transmission. When one bar is used alone, or in the case of the end bar of the daisy chained combination, the connector 56 may be connected directly to external computer 22 via a RS232 interface 23.

Page 17, last paragraph:

In a preferred embodiment, there are three S/D units 12 on each S/D bar 16, equally spaced from each other, and there are three retro-reflector matrixes 14 on each reflector bar 18, also equally spaced from each other. However, the number of units and their spacing may be modified as desired in other embodiments.

Page 18, second complete paragraph:

The construction described above also permits for ready disassembly of the bars. For example, when not in use, the S/D bar 16 can be separated by pulling out the pins 36 and undoing the screws 40. The legs 27, 26 and 28 can also be removed from their respective housings. After this disassembly, the various individual components will now be: the bar portion 30, the bar